

LISTING OF CLAIMS:

1. (Currently amended) A connector ~~Connector~~ plug for a multi-conductor cable ~~(12)~~ including a set of power conductors ~~(30)~~ and a set of signal conductors ~~(31)~~, comprising a casing ~~(10)~~ with a cable receiving opening ~~(11)~~ at its rear end, a number of contact elements ~~(42,43)~~ at its forward end connected to said power conductors ~~(30)~~ and said signal conductors ~~(31)~~ and arranged to engage contact elements on a connectable matching connector plug or jack, and a transition chamber ~~(17)~~ located in said casing ~~(10)~~ between said cable receiving opening ~~(11)~~ and said contact elements ~~(42,43)~~ and penetrated by said power conductors ~~(30)~~ and said signal conductors ~~(31)~~, characterized in that wherein said transition chamber ~~(17)~~ comprises a coiling core element ~~(18,118)~~ mounted in said casing ~~(10)~~ and forming a separate routing path ~~(41,42)~~ for each one of said set of power conductors ~~(30)~~ and said set of signal conductors ~~(31)~~, and wherein each routing path ~~(40,41)~~ provides an added length and a slack in each one of said set of power conductors ~~(30)~~ and said set of signal conductors ~~(31)~~ for absorbing cable bending related length changes of said power conductors ~~(30)~~ and said signal conductors ~~(31)~~.

2. (Currently amended) The connector ~~Connector~~ plug according to claim 1, wherein said coiling core element ~~(118)~~

comprises two oppositely located trunnion like studs ~~(119,120)~~, each one of said studs ~~(119,120)~~ extends in a direction transverse to the longitudinal direction of the casing ~~(10)~~ and forms a routing path defining winding core for either one of said sets of power conductors ~~(30)~~ and signal conductors ~~(31)~~.

3. (Currently amended) The connector connector plug according to claim 1, wherein said coiling core element ~~(18)~~ comprises two screw shaped external channels extending symmetrically about an axis which extends substantially in the longitudinal direction of the casing ~~(10)~~, said channels forming said routing paths ~~(40,41)~~ through said transition chamber ~~(17)~~.

4. (Currently amended) The connector connector plug according to ~~anyone of claims 1—3~~ claim 1, wherein an anchoring device ~~(37,38)~~ is provided for securing the cable ~~(12)~~ to the casing ~~(10)~~, said anchoring device ~~(37,38)~~ comprises a non-conductive tension wire ~~(35)~~ extending throughout the cable ~~(12)~~ in parallel with said power conductors ~~(30)~~ and said signal conductors ~~(31)~~, and said tension wire ~~(35)~~ is connected to said coiling core element ~~(18;118)~~.

5. (Currently amended) The connector connector plug according to claim 4, wherein said anchoring device ~~(37,38)~~

comprises a stop member ~~(37)~~ rigidly secured to said tension wire ~~(35)~~, and said coiling core element ~~(18,118)~~ is formed with a socket portion ~~(38)~~ for receiving and positively locking said stop member ~~(37)~~ relative to said coiling core element ~~(18,118)~~.

6. (Currently amended) The connector ~~connector~~ plug according to ~~anyone of claims 1-5~~ claim 1, wherein a conductor support plate ~~(15)~~ of a non-conductive material is mounted in the casing ~~(10)~~ between said coiling core element ~~(18,118)~~ and said contact elements ~~(42,43)~~, and said support plate ~~(15)~~ is disposed in a plane transverse to the longitudinal direction of the casing ~~(10)~~ and comprises a through aperture for each conductor ~~(30,31)~~.

7. (Currently amended) The connector ~~connector~~ plug according to claim 6, wherein said support plate ~~(15)~~ is made of a resilient material.

8. (New) The connector plug according to claim 2, wherein an anchoring device is provided for securing the cable to the casing, said anchoring device comprises a non-conductive tension wire extending throughout the cable in parallel with said power conductors and said signal conductors, and said tension wire is connected to said coiling core element.

9. (New) The connector plug according to claim 3, wherein an anchoring device is provided for securing the cable to the casing, said anchoring device comprises a non-conductive tension wire extending throughout the cable in parallel with said power conductors and said signal conductors, and said tension wire is connected to said coiling core element.

10. (New) The connector plug according to claim 8, wherein said anchoring device comprises a stop member rigidly secured to said tension wire, and said coiling core element is formed with a socket portion for receiving and positively locking said stop member relative to said coiling core element.

11. (New) The connector plug according to claim 9, wherein said anchoring device comprises a stop member rigidly secured to said tension wire, and said coiling core element is formed with a socket portion for receiving and positively locking said stop member relative to said coiling core element.

12. (New) The connector plug according to claim 2, wherein a conductor support plate of a non-conductive material is mounted in the casing between said coiling core element and said contact elements, and said support plate is disposed in a plane

transverse to the longitudinal direction of the casing and comprises a through aperture for each conductor.

13. (New) The connector plug according to claim 3, wherein a conductor support plate of a non-conductive material is mounted in the casing between said coiling core element and said contact elements, and said support plate is disposed in a plane transverse to the longitudinal direction of the casing and comprises a through aperture for each conductor.

14. (New) The connector plug according to claim 4, wherein a conductor support plate of a non-conductive material is mounted in the casing between said coiling core element and said contact elements, and said support plate is disposed in a plane transverse to the longitudinal direction of the casing and comprises a through aperture for each conductor.

15. (New) The connector plug according to claim 5, wherein a conductor support plate of a non-conductive material is mounted in the casing between said coiling core element and said contact elements, and said support plate is disposed in a plane transverse to the longitudinal direction of the casing and comprises a through aperture for each conductor.

16. (New) The connector plug according to claim 11, wherein a conductor support plate of a non-conductive material is mounted in the casing between said coiling core element and said contact elements, and said support plate is disposed in a plane transverse to the longitudinal direction of the casing and comprises a through aperture for each conductor.

17. (New) The connector plug according to claim 12, wherein said support plate is made of a resilient material.

18. (New) The connector plug according to claim 13, wherein said support plate is made of a resilient material.

19. (New) The connector plug according to claim 14, wherein said support plate is made of a resilient material.

20. (New) The connector plug according to claim 15, wherein said support plate is made of a resilient material.